Health Systems in the United Kingdom and Their Role in Increasing Equity

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ABSTRACT. The Issue. This article describes the organization of the National Health Service with respect to the primary and secondary levels of care it offers children. It begins with a personal reflection from 17 years ago that is still relevant to the challenges confronting families in the United Kingdom today. It will discuss the basics of what is different and what is similar when comparing the UK health care system to that of the United States. Pediatrics 2003;112:716–720; National Health Service, children, health systems, United Kingdom, equity, health care, prevention.

ABBREVIATION. NHS, National Health Service.

I came to England from the United States with a 7-week-old infant in 1984 and did not know what to do to get health care. I lived in a bedsit with the ceiling falling down, an old gas heater, and no hot water. I had no car and no telephone. I could not find the local health service and could not find anyone who could tell me. I was out of the system, and I did not know how to get in. We could not find better housing because no one would rent to a couple with a young infant (there were different housing rights at that time). All this and I was a pediatrician in the United States with a faculty position at Columbia.

I finally found the name of a health center, which was St Giles, but that was the wrong place. Then I found the Blanchetown Clinic. I went there, but it was the wrong day, and they turned me away. When I was finally there on the right day, they said, “This infant is several months old, why haven’t you been here before?” I looked at them and said, “Pardon,” and they put me on a high-risk register. I was assigned a health visitor, who was told to come quickly, but that took several weeks. The health visitor came to visit, and I was off the high-risk register—I had resources. That experience was pivotal to my understanding of what it is like on the other side. If I had not had resources, I would have been stuck. That is still true to some extent in the United Kingdom today, even with a National Health Service (NHS). It is still very true today in the United States.

HEALTH CARE SYSTEMS FOR CHILDREN IN THE UNITED KINGDOM

It is important to consider child health services in the framework of the law and human rights because it has important implications for the provision of care. The United Kingdom signed the United Nations Declaration on the Rights of the Child in 1991. Some key provisions of the convention had already been enacted in the Children Act, which became law in 1989. This is the main legislative framework that covers children in the United Kingdom. Section 17 is particularly important because it defines “children in need.” It states, “Children in need are those who will be unable to achieve or maintain a reasonable standard of health, or those whose health or development is likely to be significantly impaired or further impaired without services.” The Children Act is the legislative driver that allows us to argue for and put in place services that are needed for children, including children with disabilities, with family difficulties, and living in poverty. Section 17 is frequently used to argue for resources to redress deficiencies in health service for children. Otherwise, areas could be found noncompliant with the conditions of this law if challenged in court. This law remains central to the provision of health care for children.

It is also important to realize that problems in the United Kingdom are not different in substance from those in the United States, only in degree and detail. Using school health as an example, a school health physician in the United Kingdom has the same problems liaising with the education services as he or she has in the United States—only the structures and payment mechanisms are different. There are the same challenges with organizing immunization programs, assisting and referring children who have difficult families and who may be abused, dealing with young people’s reproductive issues, and serving children with disabilities and other special needs who require health care in schools.

The provision of maternity care, however, is substantively different. In the United Kingdom, all women have a named midwife when they are pregnant. They can have different modes of care, including “shared care” with the general practitioner. Women may elect to have home births with midwives attending at home. This occurs in approximately 2% of the births. Caesarean delivery rates are lower in the United Kingdom than in the United States (19% of births in the United Kingdom compared with approximately 24% in the United States).
Antenatal screening is broadly similar in the United Kingdom and the United States, although the United Kingdom provides surveillance programs to monitor the child’s development postdelivery. There are national guidelines for children published in a book called Health for All Children. The National Screening Committee considers evidence of effectiveness and cost benefit before recommending the adoption of new screening programs and has a subcommittee on children.

When a woman has an infant, her midwife is responsible for her care until the 10th day of life, at which point care is transferred to a health visitor attached to the relevant general practice where the family is registered. A health visitor is a professionally trained in early child health and development. He or she is responsible for overseeing the development of the child until age 5. Theoretically, there is a health visitor with a responsibility for each child in the country. Because of resource constraints, there is pressure to change this policy. Where previously health visitors covered a patch, over the last decade health visitors have become attached to general practices and have become part of the primary care team.

After delivery, every child is registered with a general practice. The general practice team continues its primary care clinical role throughout childhood, and the school health program assumes a population-based health role for school-aged children. Pediatricians, whether in the hospital or the community, are secondary and tertiary specialists and do not have the primary care role that they can have in the United States.

Pediatricians serve as community pediatricians in every district, although there are not enough to fill all vacant posts. The role of the community pediatrician requires a range of skills related to interagency collaboration and population-based public health, as well as individual clinical care. They provide support and services for children with disabilities and chronic illnesses and work as members of multidisciplinary teams delivering this care. They have responsibility for children in care as well. (The term “children in care” refers to children who are no longer living with their parents and over whom the state has assumed responsibility.)

In addition, pediatricians staff area-wide child protection committees in every locality. The Department of Health has mandated that each area have a designated physician and nurse with specialist responsibility for child protection. In my district, with a population of 750,000 and 12,000 births a year, we had 7 community pediatricians. We are well staffed compared with some areas that may have only 2 or 3 community pediatricians for a population of a similar size.

The United Kingdom has a national immunization program similar to the United States. There is national data monitoring of the uptake quarterly and an immunization coordinator in every district. This might be a public health physician, microbiologist, or community pediatrician. Targets are set and monitored. These targets are met nationally, although there is some local variation. Currently, the United Kingdom has reached approximately 95% coverage for the basic immunization series, including diphtheria-pertussis-tetanus, oral poliovirus vaccine, and Haemophilus influenzae type b, but it is a bit lower for measles, mumps, and rubella. When Haemophilus influenzae type b was introduced in 1992, a 75% national coverage rate was achieved in the first year. Two years later the national uptake was 95%. This example shows the remarkable capacity of a national system with local responsibility for monitoring, quality control, and delivery to attain complete coverage of immunizations. Some districts have somewhat lower rates; these tend to be communities that are more deprived.

These are a few of the many health services available to children, but there are others as well, including child health surveillance, school health programs, and health promotion services. They represent a comprehensive network of care available to children and their families on an individual and neighborhood basis. They are periodically reviewed and restructured.

**CHALLENGES FACING CHILD HEALTH SERVICES IN THE UNITED KINGDOM**

Given universal access to the United Kingdom’s comprehensive NHS, what level of health have we achieved? Significant health inequalities still exist for children in the United Kingdom, tied mainly to the growing impact of poverty on child health outcomes. There are holes in the safety net, and failures exist. In particular, the UK system has not served adolescents well. The United Kingdom has a high adolescent pregnancy rate that has remained stable over the last decade. It is the highest rate in the European Union, although it is lower than the United States. In England and Wales in 1998, 65 of 1000 women 15 to 19 years of age became pregnant. Reducing the adolescent pregnancy rate has become one of the government’s highest health priorities.

Adolescent smoking also is a significant issue in the United Kingdom. Among 11-year-olds, 78% have never smoked, but by 15, only 34% have never smoked. We fail young people in both our countries during their childhood and adolescent years. We miss opportunities to engage these children and adolescents in health-related activities in school and the community and too often do not intervene until they are older adolescents and already in trouble.

With respect to breastfeeding, promotion of breastfeeding has been a major policy initiative of the government, but inequities continue. Figure 1 shows the proportion of mothers who initiated breastfeeding between 1980 and 1995 stratified by age of mother. There is a huge gradient that has not changed significantly between 1980 and 1995 despite the emphasis on breastfeeding by the government. If we consider the rate of continued breastfeeding at 6 weeks compared with the rates at birth, they are lower and the gradient is even steeper, especially in women who have not finished secondary educa-
Smoking before and during pregnancy shows the same gradient (Fig 2).\textsuperscript{2,3}

Several explanations exist for these systemic problems. One is that although apparently planned, health services often are fragmented. The United Kingdom has universal care and loosely connected networks, but they may not communicate.\textsuperscript{11} Acute and hospital-based care may be delivered in totally separate institutions and in different places from community-based services. This is true, although it has been a policy of the Royal College of Pediatrics and Child Health that children’s services be integrated across the community. School health often is provided by community health services and sometimes by general practices. Community child health services may be organized alongside mental health services, or child and adolescent mental health services may be provided by a third organization. With the periodic reorganization of national health programs, child health services have not received priority and have tended to be attached to other services deemed more important. Health promotion and child and family mental health services have similarly been attached to many different programs in the past. There are huge challenges to ensure that care is integrated and focused on the needs of children and families. There is little research on what actually enhances this coordination and communication.\textsuperscript{12}

Another issue is the control that the Department of Health has on how services are organized and on the priorities for services. If the central government says the priorities are “cardiac disease and cancer,” then local health authorities will say cardiac disease and cancer. This has led to an overly rigid approach to service development. There has been such a focus on limiting guidelines and priorities set by the government that it has led to the exclusion of and disinvestment in other areas. The extremely close relationship between health services and the central government undermines the ability of the NHS to remain independent and meet the shifting and complex needs of diverse populations. It also undermines the ability of long-term development and change because its leaders and government all are working with short-term agendas. These issues currently are under discussion with the government and within professional societies. The central issue is the extent to which this system can provide health care that will lead to equitable and positive health, social, and educational outcomes.

With respect to mental health, the need for services is substantial and often unmet, whether it be support for parenting or more acute support for families in distress. The lack of mental health services is an example of how a national health service, tied to direct government leadership, can limit the development and implementation of community-based programs.\textsuperscript{13} Mental health services have been linked by national policy to the strongest primary care services. These services are in the most well-off areas. These practices already offer the most integrated and comprehensive care, and as a result of these policies, they receive more support than localities where care has been more disorganized and fragmented and there is the greatest need. This has meant that fewer mental health services, such as community disability services, are available for children of families with low income. As a result, pediatricians often cannot get an assessment for a year or more on a child who is disabled. Linking mental health services to the best-organized practices actually has led to poorer services for all children. This has resulted from a misapplication of current principles and policies and is a demonstration of some of the risks of a national system tied to a politically driven central organization.

Finally, there are different commissioning groups for different sectors—health, social care, and education—and though they need to work together well, they often do not communicate with each other. The social care sector is within the local government authority. Education also is in the local authority, but it does not communicate well with social care. Education at the borough or county level has been stripped of its central role and much of the power given to local school governors with school-based leadership.

![Fig 1. Incidence of breastfeeding by age of mother completing education.](image1)

![Fig 2. Smoking and pregnancy by social class of partner, 1995.](image2)
and control of school budgets. The functions that remain with local authority government are limited, and there are areas where functions fall between the cracks of changing policies, leading to a lack of clarity between them as to where boundaries lie.

A similar lack of clarity about roles affects health structures as well. In health, we have primary care groups, which are relatively new structures with responsibility for populations of approximately 100,000, and health authorities that relate to those primary care groups and cover a larger population. It is not always clear which functions belong at the primary care group (or trust) level. In the new NHS plans, the government raises the future possibility of joint health care and commissioning and of joint trusts. How well new plans and structures function will depend on the detail and timing of planning and attention to all the functions required to deliver health care.

Despite these challenges, the system has many strengths, including 1) it is a nationally led and managed program that integrates different sectors, 2) it provides effective resources, and 3) it effectively informs the public. It also systematically monitors and reviews its progress. The reorganization and expansion of pediatric intensive care is a recent example of how a centrally led health care system can work effectively. The government agreed on a set of principles, made small investments, and reconfigured the care to make it more effective and efficient.14

THE FUTURE FOR CHILD HEALTH CARE IN THE UNITED KINGDOM

The primary challenge facing the NHS is how to provide acute and chronic care, implement health promotion and preventive care, and interface with other sectors. Health commissioners face insuperable problems apart from these challenges related to central government prioritization unrelated to local need or capacity. Budgets are inadequate to accomplish what is needed. Available staff are too few to fill positions and frequently are demoralized. Year on year funding, without long-term budgets, is a major handicap. In the organizations that plan and commission health care, there is very little expertise on children and child health and little acknowledgment of options to engage specialists outside government to inform policy development. The expertise on mental health is completely inadequate, and the need is great. In one area of London, a recent survey showed that approximately 70% of families had at least 1 major social or mental health difficulty and 29% had 3 or more.15

Should programs focus on populations of children and attempt to shift whole distributions of health outcomes, or should the focus be on identified groups at high risk?14 There are logical strategies based on the mathematics of distributions to answer these questions, but they must be analyzed carefully in the context of situations in which resources are inadequate to mount universal intervention strategies. If adequate resources are not available to meet the needs of most people, then it may be necessary to target services for the needs of the most deprived.

Where there is a tremendous failure to meet the health and social needs that exist in populations that are the poorest, it is difficult to take forward a strategy that aims to affect the whole population versus one that provides services for the unprovided.

There are significant barriers in the United Kingdom to decreasing inequalities in health. To do so, health, social care, and education must work together. However, different sectors speak different languages. They have separate budgets, and there are barriers to budget sharing. The budgets are not large enough to fund adequate care. It is clear that for children who are the poorest, the number of difficulties faced is not just arithmetic but rather a geometric progression. Families with multiple risk factors need different and more extensive services than the population as a whole. Formulas to allocate budgets must consider the geometric impact of the many risk factors on health outcomes.

Children only recently have become a priority for the UK government. The independent review on health inequalities commissioned by the government stated, “The (interventions) with the best chance of reducing future inequalities are related to children, parents, and in particular to present and future mothers. We have therefore decided in our report to give these priority.”16 Although child health is now 1 of the top 14 priorities for health, prevention in general is not a priority and therefore not well-enough funded—the priority is still focused primarily on acute care.

Despite these challenges, there are clear strengths to draw on in implementing strategies to reduce health inequalities for children in the United Kingdom. There is a long-standing tradition of district-based services with administrative and clinical responsibility for population-based health, examples being the district immunization coordinator and the named physicians and nurses responsible for the care of families and populations of children. The increasing focus on evidence-based clinical effectiveness has become a strength in the UK health care system. This has primarily focused on the acute care sector, where most of the research has occurred. With respect to community services, there is so little known and inadequate funding for research. Similarly, there has been very little research into the effectiveness of the services provided by professions allied to health, such as physiotherapy, occupational therapy, and speech therapy. It is now difficult to commission care when there is no evidence of its effectiveness. However, it may take decades to learn what works in community care. We know a lot, but we do not know enough. The requirement of obtaining evidence of effectiveness could be a strength and a barrier when commissioning complex child health services, particularly across sectors.

CONCLUSIONS

In the United Kingdom, we have an NHS, free for all, with a broad and powerful legislative framework guaranteeing the rights of children to appropriate care to ensure their health and optimal development. This is far better than trying to make a system work
without free and comprehensive provision of health care. We have population-based links and the ability to launch and maintain national health care strategies. Challenges result from the too-rigid application of narrow priorities. UK health professionals and commissioners are in agreement that evidence of clinical effectiveness—or clear evidence of lack of effectiveness—should have an impact on commissioning and delivering care. There is increasing recognition of the impact of early life experiences on child and family health outcomes. Our current government has made a commitment to eliminating child poverty and improving the NHS with a variety of approaches, including increasing the budget, increasing staff training, and improving care and facilities. This includes a commitment to roll out services related to health interventions and social measures such as education, child care, and employment, which affect later health and well-being.

To achieve these goals, we urgently need the development of an appropriate research strategy to determine what works in improving the health and well-being of children and their families. The potential exists to turn research knowledge into policy and policy into practice. The Royal College of Paediatrics and Child Health and the American Academy of Pediatrics should engage in a joint initiative to apply medical effectiveness and evidence-based medicine methods to better define what works in community pediatrics. The similarities in the pathologies affecting our children and the differences in our health systems provide an ideal laboratory to develop and implement longitudinal studies that ultimately could improve the health of our children. Our efforts must be provided in ways that make a difference to the people we serve.

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